

AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) An apparatus for default encryption of audio/video content for distribution, comprising:

a conditional access encryption system that uses changing encryption code words as live encryption keys;

a conditional access management system that communicates with and manages the conditional access encryption system, wherein the conditional access management system provides the live encryption keys to the conditional access encryption system and periodically changes the live encryption keys; and

a non-volatile memory storing fixed default encryption information in a configuration table for use by the conditional access encryption system to encrypt certain categories of audio/video content that are always to be encrypted upon a communication failure between the conditional access encryption system and the conditional access management system in which said communication failure results in an inability for the conditional access management system to provide the live encryption keys to the conditional access encryption system which would otherwise result in the audio/video content being distributed unencrypted, ~~the default encryption key being distinct from keys supplied by and periodically changed by the conditional access management system; and~~

where the conditional access encryption system utilizes the fixed default encryption information to provide encryption to the certain categories of audio/video content that are always to be encrypted during times when the communication failure prohibits communication of live encryption keys to the conditional access encryption system.

2. (Currently Amended) The apparatus of claim 1, wherein the fixed default encryption information comprises fixed default encryption keys.

3. (Currently Amended) The apparatus of claim 2, wherein the fixed default encryption keys are unique for each of a plurality of channels.

4. (Currently Amended) The apparatus of claim 1, further comprising a control computer that initializes the configuration memory with the fixed default encryption information.

5. (Cancelled Without Prejudice)

6. (Currently Amended) The apparatus of claim 1, wherein the content is encrypted with the fixed default encryption information if a communication failure occurs between the conditional access management system and the conditional access encryption system.

7. (Currently Amended) The apparatus of claim 1, wherein the content is encrypted with the fixed default encryption information if communication cannot be established between the conditional access management system and the conditional access encryption system.

8. (Original) The apparatus according to claim 1, wherein the conditional access system provides selective encryption of the content.

9. (Currently Amended) An apparatus for default encryption of audio/video content, comprising:

a conditional access system;

means for encrypting content in the conditional access system that uses changing encryption code words as encryption keys;

means for managing the conditional access system, wherein the means for managing provides the live encryption keys to the means for encrypting and periodically changes the live encryption keys;

means for communicating between the managing means and the encrypting means;

means for storing fixed default encryption information in a configuration for the conditional access system in a non-volatile manner for use by the conditional access system to encrypt certain categories of audio/video content that are always to be encrypted upon a communication failure between the conditional access system and the managing means in which

said communication failure results in an inability for the managing means to provide the means for encryption keys to the means for encrypting which would otherwise result in the audio/video content being distributed unencrypted, where the means for encrypting utilizes the fixed default encryption information to provide encryption to the certain categories of audio/video content that are always to be encrypted during times when the communication failure prohibits communication of live encryption keys to the means for encrypting ~~the default encryption key being distinct from keys supplied by and periodically changed by the means for managing;~~ and means for configuring the storing means with the fixed default encryption information.

10. (Currently Amended) The apparatus of claim 9, wherein the fixed default encryption information comprises fixed default encryption keys.

11. (Currently Amended) The apparatus of claim 10, wherein the fixed default encryption keys are unique for each of a plurality of channels.

12. (Cancelled Without Prejudice)

13. (Currently Amended) The apparatus of claim 9, wherein the content is encrypted with the fixed default encryption information if a communication failure occurs between the management means and the encrypting means.

14. (Currently Amended) The apparatus of claim 9, wherein the content is encrypted with the fixed default encryption information if communication cannot be established between the management means and the encrypting means.

15. (Original) The apparatus according to claim 9, wherein the conditional access system provides selective encryption of the content.

16. (Currently Amended) A method of default encryption of audio/video content for distribution,

comprising:

initializing a non-volatile default configuration memory with fixed default encryption information for use in encryption of certain categories of audio/video content that are always to be encrypted;

communicating with a conditional access management system to retrieve active encryption information for a conditional access system;

~~the default encryption being distinct from active encryption information supplied by the conditional access management system~~

encrypting the certain categories of audio/video content for distribution with the active encryption information;

distributing the certain categories of audio/video content encrypted with active encryption information;

if a communication failure occurs between the conditional access management system and the conditional access system in which said communication failure results in an inability for the conditional access management system to provide updated active encryption information to support the encrypting which would otherwise result in the certain categories of audio/video content being distributed unencrypted:

reading the fixed default encryption information from the default configuration memory;

encrypting the certain categories of audio/video content that are always to be encrypted with the fixed default encryption information; [[and]]

distributing the certain categories of audio/video content encrypted with the fixed default encryption information; and,

whereby the conditional access encryption system utilizes the fixed default encryption information to provide encryption to the certain categories of audio/video content that are always to be encrypted during times when the communication failure prohibits communication of live encryption keys to the conditional access encryption system.

17. (Currently Amended) The method of claim 16, further comprising:

if communication is restored between the conditional access management system and the conditional access system:

communicating with the conditional access management system to retrieve active encryption information for the conditional access system;

encrypting the certain categories of audio/video content for distribution with the active encryption information; and

distributing the certain categories of audio/video content encrypted with active encryption information.

18. (Currently Amended) The method of claim 16, wherein the fixed default encryption information comprises fixed default encryption keys.

19. (Currently Amended) The method of claim 18, wherein the fixed default encryption keys are unique for each of a plurality of channels.

20. (Cancelled Without Prejudice)

21. (Original) The method of claim 16, wherein the encryption comprises selective encryption.

22. (Original) A computer readable medium storing instructions which, when executed on a programmed processor, carry out the process according to claim 16.

23. (Currently Amended) A method of default encryption of audio/video content for distribution, comprising:

initializing a non-volatile default configuration memory with default encryption information;

attempting to communicate with a conditional access management system to retrieve active encryption information for a conditional access system;

if communication cannot be established between the conditional access management

system and the conditional access system such that said not establishing communication results in an inability for the conditional access management system to provide the active encryption information to the conditional access encryption system which would otherwise result in the certain categories of audio/video content that are always to be encrypted being distributed unencrypted:

reading the fixed default encryption information from the default configuration memory; ~~the default encryption information being distinct active encryption information supplied by the conditional access management system;~~

encrypting the certain categories of audio/video content with the fixed default encryption information; and

distributing the certain categories of audio/video content encrypted with the fixed default encryption information so that the conditional access encryption system utilizes the fixed default encryption information to provide encryption to the certain categories of audio/video content that are always to be encrypted during times when the communication failure prohibits communication of live encryption keys to the conditional access encryption system.

24. (Currently Amended) The method of claim 23, further comprising:

if communication is achieved between the conditional access management system and the conditional access system:

receiving active encryption information for the certain categories of audio/video content for distribution in the conditional access system;

encrypting the certain categories of content with the active encryption information; and

distributing the certain categories of content encrypted with active encryption information.

25. (Currently Amended) The method of claim 23, wherein the fixed default encryption information comprises fixed default encryption keys.

26. (Currently Amended) The method of claim 25, wherein the fixed default encryption keys are unique for each of a plurality of channels.

27. (Cancelled Without Prejudice)

28. (Original) A computer readable medium storing instructions which, when executed on a programmed processor, carry out the process according to claim 23.

29. (Currently Amended) A method of default encryption of audio/video content for distribution, comprising:

initializing a non-volatile default configuration memory with fixed default encryption information;

communicating with a conditional access management system to retrieve active encryption information for certain categories of the audio/video content that are always to be encrypted for distribution in a conditional access system;

encrypting the certain categories of audio/video content with the active encryption information;

distributing the certain categories of audio/video content encrypted with active encryption information;

signaling all set-top boxes within the conditional access system instructing them to use the active encryption information;

if a communication failure occurs between the conditional access management system and the conditional access system in which said communication failure results in an inability for the conditional access management system to provide the active encryption information to the conditional access encryption system which would otherwise result in the certain categories of audio/video content being distributed unencrypted:

reading the fixed default encryption information from the default configuration memory, ~~the default encryption information being distinct from active encryption information supplied by the conditional access management system;~~

encrypting the certain categories of audio/video content with the default encryption information;

signaling all set-top boxes within the conditional access system instructing them to use the fixed default encryption information; and

distributing the certain categories of audio/video content encrypted with the fixed default encryption information so that the conditional access encryption system utilizes the fixed default encryption information to provide encryption to the certain categories of audio/video content that are always to be encrypted during times when the communication failure prohibits communication of live encryption keys to the conditional access encryption system.

30. (Currently Amended) The method of claim 29, further comprising:

if communication is restored between the conditional access management system and the conditional access system:

receiving active encryption information for the certain categories of audio/video content for distribution in the conditional access system;

encrypting the certain categories of audio/video content with the active encryption information;

signaling all set-top boxes within the conditional access system instructing them to use the active encryption information; and

distributing the certain categories of audio/video content encrypted with active encryption information.

31. (Currently Amended) The method of claim 29, wherein the fixed default encryption information comprises default encryption keys.

32. (Currently Amended) The method of claim 31, wherein the fixed default encryption keys are unique for each of a plurality of channels.

33. (Cancelled Without Prejudice)

34. (Original) A computer readable medium storing instructions which, when executed on a programmed processor, carry out the process according to claim 29.

35. (Currently Amended) A method of default encryption of audio/video content for distribution, comprising:

- initializing a non-volatile default configuration memory with fixed default encryption information;

- attempting to communicate with a conditional access management system to retrieve active encryption information for certain categories of the audio/video content that are always to be encrypted for distribution in a conditional access system;

- if communication cannot be established between the conditional access management system and the conditional access system such that said not establishing communication results in an inability for the conditional access management system to provide the active encryption information to the conditional access encryption system which would otherwise result in the certain categories of audio/video content being distributed unencrypted:

 - reading the fixed default encryption information from the default configuration memory; ~~the default encryption information being distinct active encryption information supplied by the conditional access management system;~~

 - encrypting the certain categories of audio/video content with the fixed default encryption information;

 - signaling all set-top boxes within the conditional access system instructing them to use the fixed default encryption information;

 - distributing the certain categories of audio/video content encrypted with the fixed default encryption information.

36. (Currently Amended) The method of claim 35, further comprising:

- if communication is achieved between the conditional access management system and the conditional access system:

receiving active encryption information for the certain categories of audio/video content for distribution in the conditional access system;

encrypting the certain categories of audio/video content with the active encryption information;

signaling all set-top boxes within the conditional access system instructing them to use the active encryption information; and

distributing the certain categories of audio/video content encrypted with active encryption information.

37. (Currently Amended) The method of claim 35, wherein the fixed default encryption information comprises fixed default encryption keys.

38. (Currently Amended) The method of claim 37, wherein the fixed default encryption keys are unique for each of a plurality of channels.

39. (Cancelled Without Prejudice)

40. (Original) A computer readable medium storing instructions which, when executed on a programmed processor, carry out the process according to claim 35.

41. (Currently Amended) An apparatus for default decryption of audio/video content, comprising:

a receiver conditional access system that provides decryption functions;

an even decryption engine;

an odd decryption engine;

a memory storing odd and even decryption keys for use by the odd and even decryption engines;

said memory also comprising non-volatile storage storing a fixed default decryption key for use to decrypt certain categories of the audio/video content that are always to be encrypted

when the conditional access system receives signaling instructing it to use the default decryption key instead of the odd and even decryption keys; and

wherein, such signaling instruction is received when a communication failure at an audio/video content provider would otherwise permit content to be provided without benefit of encryption for decryption using the odd and even decryption keys by the odd and even decryption engines so that the certain categories of audio/video content are always encrypted.

42. (Currently Amended) The apparatus of claim 41, wherein the fixed default decryption information comprises fixed default decryption keys.

43. (Currently Amended) The apparatus of claim 42, wherein the fixed default decryption keys are unique for each of a plurality of channels.

44. (Currently Amended) The apparatus of claim 41, wherein, when signaled to initialize the fixed default decryption key, the conditional access system initializes the memory with fixed default encryption information received with the signaling.

45. (Cancelled Without Prejudice)

46. (Previously Presented) The apparatus of claim 41, wherein the content is decrypted with the fixed default decryption key upon reception of signaling instructing the conditional access system to use the fixed default decryption key.

47. (Currently Amended) An apparatus for default decryption of audio/video content, comprising:

means for receiving audio/video content in a conditional access system that provides decryption functions;

an even decryption engine;

an odd decryption engine;

a memory storing alternate decryption code words serving as live decryption keys for use by the odd and even decryption engines;

means for receiving signaling in the conditional access system;

means for storing fixed default decryption information in a non-volatile manner for audio/video content received in the conditional access system for use to decrypt the certain categories of audio/video content that are always to be encrypted when the conditional access system receives signaling instructing it to use the fixed default decryption information instead of the odd and even decryption keys, wherein such signaling instruction is received when a communication failure at an audio/video content provider would otherwise permit the certain categories of audio/video content to be provided without benefit of encryption for decryption using the odd or even decryption keys; and

means for configuring the storing means with the fixed default decryption information,

where the conditional access encryption system utilizes the fixed default encryption information to provide encryption to the certain categories of audio/video content that are always to be encrypted during times when the communication failure prohibits communication of live encryption keys to the conditional access encryption system.

48. (Currently Amended) The apparatus of claim 47, wherein the fixed default decryption information comprises fixed default decryption keys.

49. (Currently Amended) The apparatus of claim 48, wherein the fixed default decryption keys are unique for each of a plurality of channels.

50. (Cancelled Without Prejudice)

51. (Currently Amended) The apparatus of claim 47, wherein the certain audio/video content is decrypted with the fixed default decryption information upon reception of signaling instructing the conditional access system to use the fixed default decryption information.

52. (Currently Amended) A method of default decryption of audio/video content, comprising:

receiving audio/video content in a conditional access system that provides decryption functions, said audio/video content normally being decrypted using an even decryption engine and an odd decryption engine operating by use of active odd and even decryption keys;

receiving signaling instructing storage of fixed default decryption information for decryption of certain audio/video content that are always to be encrypted in a conditional access system;

receiving fixed default decryption information for use to decrypt the fixed audio/video content when the conditional access system receives signaling instructing it to use the fixed default decryption information;

initializing a non-volatile default configuration memory with the fixed default decryption information;

receiving active decryption information with audio/video content in the conditional access system;

decrypting selected channels with the odd and even decryption engines using the odd and even decryption keys;

if signaling reception instructs use of the fixed default decryption information for the conditional access system:

reading the fixed default decryption information for the audio/video content from the default configuration memory; and

decrypting audio/video content with the fixed default decryption information; and

wherein, such signaling reception instructs use of the default decryption information when a communication failure at an audio/video content provider would otherwise permit content to be provided without benefit of encryption for decryption using the odd and even decryption keys by the odd and even decryption engines so that the certain content can always be encrypted.

53. (Previously Presented) The method of claim 52, further comprising:

if signaling reception instructs use of active decryption information:

receiving active decryption information with the audio/video content in the conditional access system;

decrypting audio/video content with the active decryption information.

54. (Currently Amended) The method of claim 52, wherein the fixed default decryption information comprises fixed default decryption keys.

55. (Currently Amended) The method of claim 54, wherein the fixed default decryption keys are unique for each of a plurality of channels.

56. (Cancelled Without Prejudice)

57. (Original) A computer readable medium storing instructions which, when executed on a programmed processor, carry out the process according to claim 52.